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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/739,225

12/19/2003

Kris W. Johnson

08350.3502

8467

7590

12/21/2004

Finnegan, Henderson, Farabow,  
Garrett & Dunner, L.L.P.  
1300 I Street, N.W.  
Washington, DC 20005-3315

EXAMINER

TRA, ANH QUAN

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/739,225

Applicant(s)

JOHNSON ET AL.

Examiner

Quan Tra

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 10-14 and 17 is/are rejected.
- 7) ☒ Claim(s) 4, 8, 9, 15, 16 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/19/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

Box 16 in figure 1 should be labeled, i.e. processor, ground compensator...etc., in order to one skill in the art would known how to make and use the invention.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims are rejected under 35 U.S.C. 102(b) as being anticipated by Nagata (USP 5841308).

As to claim 1, Nagata discloses in figure 5 a method of ground level compensation, comprising: measuring a voltage of at least one signal (ei1) with respect to a primary ground potential (13) (*the amplifier 51 measures the voltage of signal ei1*); measuring, with respect to the primary ground potential, a voltage level associated with a secondary ground potential (14) (*the amplifier 52 measures the voltage generated by C2 which associated with potential 14*), calculating a difference between the voltage level associated with the secondary ground potential and an expected value (Vref) (*the amplifier 52 generate voltage represent the different between the voltage generated by C2 and Vref*); adjusting the measured voltage of the at least one signal by an amount corresponding to the difference (the output of amplifier 51 then adjusts signal ei1 by generating signal eo1 in response to the output of amplifier 52).

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As to claim 2, figure 5 shows that the voltage level associated with the secondary ground potential is offset from the secondary ground potential by a fixed amount.

As to claim 3, figure 5 shows that the fixed amount of offset is between 0V and 5V.

As to claim 5, figure 5 shows that the at least one signal is an analog input signal to a control processor (1 and 3).

As to claim 6, figure 5 shows that the primary ground potential is a ground potential of a control processor.

As to claim 7, it is seen as an intended use for selecting the secondary ground potential to be a single point ground potential for a vehicle.

As further called in for claims 10 and 17, figure 5 shows a control unit (11); a primary ground point (13) for the control unit, the primary ground point having a first voltage potential; at least one data input (ei1) supplying an input signal to the control unit; a reference input (output of C2) supplying a second voltage potential, associated with a secondary ground point (14), to the control unit; and a processor (1, 3).

As to claims 11 and 12, the circuit figure 5 is capable used in a vehicle. It is seen as an intended use to use the circuit in the vehicle.

As to claim 13, figure 5 shows that the second voltage potential includes a voltage level of the secondary ground point and an offset voltage.

As to claim 14, figure 5 shows that the offset voltage is between 0V and 5V.

***Allowable Subject Matter***

3. Claims 4, 8, 9, 15, 16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4, 15 and 18 would be allowable because the prior art fails to teach or suggest that the expected value is equivalent to the fixed amount of offset.

Claims 8 and 16 would be allowable because the prior art fails to teach or suggest that the step of adjusting the measured voltage is performed periodically.

As to claim 9, would be allowable because the prior art fails to teach or suggest that the difference varies over time.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are cited as interest because they show some circuits analogous to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan Tra whose telephone number is 571-272-1755. The examiner can normally be reached on 8:00 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Quan Tra', with a stylized, flowing script.

Quan Tra  
Primary Examiner

December 14, 2004